This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

THIS PAGE BLANK (USPTO)

OVE OCA	
NIN Please type a plus sign (+) inside this box	▶[+]
100 of the a bigo sign (1 more and bex	PTO/SB/81 (02-01)
Ar. Me	Approved for use through 10/31/2002. OMB 0651-0035
& TRADE	U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons	s are required to respond to a collection of information unless it display a valid OMB control number.

POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	09/980,250
Filing Date	May 24, 2002
First Named Inventor	Koops et al.
Title	Miniaturized Terahert
Group Art Unit 2881	Radiation Source
Examiner Name	
Attorney Docket Number	8129

I hereby appoint:		[
Practitioners at OR	Customer Number	Place Customer Number Bar Code Label here		
🗴 Practitioner(s) na	med below:			
,	Name	Registration Number		
	L. Mitchell	36,873		
Charles	R. Rust	18,716		
<u> </u>				
<u> </u>				
as my/our attorney(s) o business in the United	r agent(s) to prosecute the application ide States Patent and Trademark Office conn	entified above, and to transact all ected therewith.		
	espondence address for the above-identif	ied application to:		
OR	——————————————————————————————————————	Place Customer		
Practitioners at Customer Number Number Bar Code Label here				
OR		Labornoro		
Firm <i>or</i> Individual Name	Woodling, Krost and Rust (Kenneth L. Mitchell)			
Address	9213 Chillicothe Road			
Address				
City	Kirtland S	tate Ohio Zip 44094		
Country	United States of America			
Telephone	440-256-4150 F	ax 440-256-7453		
I am the:				
☐ Applicant/Inventor.				
Applicant/Inventor. Applicant/Inventor. Assignee of record of the entire interest. See 37 CFR 3.71.				
Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).				
SIGNATURE of Applicant or Assignee of Record				
Name CARISTIAN HOUKENEY BR				
Signature Lot to felow				
Date 0	.5.03			
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.				
	rms are submitted.			

PTO/SB/96 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S.Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

tion Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b) NaWoTec GmbH Applicant/Patent Owner: Application No./Patent No.:_09/980,250 Filed/Issue Date: May 24, 2002 MINIATURIZED TERAHERTZ RADIATION SOURCE a Corporation NaWoTec GmbH (Type of Assignee, e.g., corporation, partnership, university, government agendy (Name of Assignee) states that it is: 1. The assignee of the entire right, title, and interest; or 2.
an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is _ in the patent application/patent identified above by virtue of either: A. [] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame ____, or for which a copy thereof is attached. OR B. [x] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below: Hans W. P. Koops, Tobias Bauer, Wolfgang Elasser, Hartmut Roskos 1. From: Filip Floreani, To: Duetsche Telekom AG The document was recorded in the United States Patent and Trademark Office at Reel ______, Frame ______, or for which a copy thereof is attached. 2 From: Duetschee Telekom AG To: NaWoTec GmbH The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame_____, or for which a copy thereof is attached. To:___ 3. From: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame_____, or for which a copy thereof is attached. [] Additional documents in the chain of title are listed on a supplemental sheet. [xkCopies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08] The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee. LARISTIAN HOLLEMBU Title

ASSIGNMENT

In consideration of One Dollar and other good and valuable consideration, receipt of which is hereby acknowledged, Deutsche Telekom AG, a corporation of the Country of Germany, located and doing business at Friedrich-Ebert-Allee 140, 53113 Bonn, GERMANY, hereby sells, transfers, sets over and assigns unto NaWoTec GmbH, a corporation of the country of GERMANY, located and doing business at Industriestr. 1, 64380 Rossdorf, GERMANY, its successors, assigns, nominees, or other legal representatives, the entire right, title and interest in and to U.S. Patent Application Serial No.09/980,250 filed May 24, 2002 entitled MINIATURIZED TERAHERTZ RADIATION SOURCE and the invention as set forth in said Application and any Applications or Patents derived therefrom and the right to sue for and recover for all past, present and future infringements of any such patent(s) which may issue on said Application.

This assignment document executed on the date indicated below is evidence of a previously effected transfer (nunc pro tunc) of said patent application and the right to sue for and recover for all past, present and future infringements of any patent(s) which may issue on said Application.

DEUTSCHE TELEKOM, AG By Weres de l
Printed Name Dr. Wilhelm DEUSCHEL
Title (An Officer) Head of Patent Dept.
Date May 15, 2003

799092US

[2345/170]

ASSIGNMENT

WHEREAS, WE,

Hans W.P. KOOPS
Ernst-Ludwig-Str. 16
64372 Ober-Ramstadt
Federal Republic of Germany
Citizenship: German

Tobias BAUER
Weisskirchener Weg 37
60439 Frankfurt/M.
Federal Republic of Germany
Citizenship: German

Wolfgang ELSÄSSER Büchberstr. 4 64342 Seeheim-Jugenheim Federal Republic of Germany Citizenship: German

Filip FLOREANI
Am aten Bahnhof 6-42
64293 Darmstadt
Federal Republic of Germany
Citizenship: German?

30 YORK ROAD
EDGBASTON
BIRMINGHAM
B16 3JB; U.K.
CITIZENSHIF: ITALIAN

and

Hartmut ROSKOS
Grüneburgweg 106
60323 Frankfurt/M.
Federal Republic of Germany
Citizenship: German

have made new and useful inventions and discoveries in MINIATURIZED TERAHERTZ RADIATION SOURCE, the specification of which was filed as International Application Number PCT/EP00/04167 on May 10, 2000 and filed as U.S. application on November 26, 2001 having U.S. Serial No. 09/980,250 for Letters Patent in the U.S.P.T.O.; and

WHEREAS Deutsche Telekom AG, having a place of business at Friedrich-Ebert-Allee 140, D-53113 Bonn, Federal Republic of Germany, and who, together with its

[2345/170]

ASSIGNMENT

WHEREAS, WE,

Hans W.P. KOOPS
Ernst-Ludwig-Str. 16
64372 Ober-Ramstadt
Federal Republic of Germany
Citizenship: German

Tobias BAUER
Weisskirchener Weg 37
60439 Frankfurt/M.
Federal Republic of Germany
Citizenship: German

Wolfgang ELSÄSSER Büchberstr. 4 64342 Seeheim-Jugenheim Federal Republic of Germany Citizenship: German

Filip FLOREANI Am aten Bahnhof 6-42 64293 Darmstadt Federal Republic of Germany Citizenship: German?

and

Hartmut ROSKOS
Grüneburgweg 106
60323 Frankfurt/M.
Federal Republic of Germany
Citizenship: German

Althönigst. 40 61476 Kronberg/ Oberböckstadt

charged HU Tors, 8.3. 2002

have made new and useful inventions and discoveries in MINIATURIZED TERAHERTZ RADIATION SOURCE, the specification of which was filed as International Application Number PCT/EP00/04167 on May 10, 2000 and filed as U.S. application on November 26, 2001 having U.S. Serial No. 09/980,250 for Letters Patent in the U.S.P.T.O.; and

WHEREAS Deutsche Telekom AG, having a place of business at Friedrich-Ebert-Allee 140, D-53113 Bonn, Federal Republic of Germany, and who, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited,

NOW, THEREFORE, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservations:

- 1. Assign, transfer, and convey to Assignee the entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries, including all divisional, renewal, substitute, and continuation applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent.
- 2. Authorize Assignee to file patent applications in any or all countries for any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under an International Convention or otherwise.
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct.
- 4. Warrant that we have not conveyed to others any right, title, or interest in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; that we have good right to assign the same to Assignee without encumbrance; and that we are aware of no claim to the contrary.
- 5. Bind our heirs, legal representatives, and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to

communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives, or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries; and to testify to the same in any interference, arbitration, or litigation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 10 day of 10.3., 2002.

Hans W.P. KOOPS

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 8 day of morel, 2002.

Tobias BAUER

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 11th day of MARCH, 2002.

Filip FLOREAN

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this $\frac{3}{2}$ day of $\frac{1}{2}$ day of $\frac{1}{2}$

Hartmut ROSKOS